

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
CONTRACT CHANGE ORDER NO. 72 SUPPL. NO. 01

ROAD: 04-SF-80-13.2, 13.9 CONTRACT NO.: 04-0120F4 SHEET 3 of 38 SHEETS



10-3.14 – LIGHTING

AVIATION WARNING SYSTEM

~~The aircraft warning aviation light shall be a medium intensity, omnidirectional, red obstruction light that complies with AC 70/7460-1K, FAA L-864 and ICAO Annex 14 Chapter 6 for a flash rate of 20 flashes per minute. The light shall consist of an aviation red, FA-250 lantern containing 6 each, 24 volt, 150 watt, prefoecussed, high pressure halogen marine signal lamps mounted on a 6 place microprocessor controlled lamp changer. The lens shall be a 250 mm acrylic Fresnal lens with a red lens cover. The housing shall be corrosion resistant cast aluminum with stainless steel fittings and a double silicone rubber lens gasket. A bird spike shall be provided at the top optic. Lanterns shall be hinged at midpoint for relamping. When the operating lamp fails, the lampchanger shall automatically rotate the next lamp into precise focal position. When all lamps fail, the lampchanger shall automatically post a failure alarm. The lampchanger shall use a pulse with modulated regulator to operate the lamp at 24 volts giving 2000 hours of life per lamp. Input voltage shall be 480 volts, single phase. In order to operate the lampchanger and the aviation light, a transformer shall be fitted with in the lantern to accept the supply voltage of 480 volts.~~

~~The red steady aircraft warning aviation light shall be a. The light shall consist of a single 155 mm red acrylic lenses mounted on a FA-249 (WA) lantern. The lantern shall contains four each, 12 volt, prefoecussed, marine signal lamps mounted on a four lampchanger. The housing shall be corrosion resistant cast aluminum with stainless steel fittings and a double silicone rubber lens gasket. A bird spike shall be provided at the top optic. Lanterns shall be hinged at midpoint for relamping. When the operating lamp fails, the lampchanger automatically rotates the next lamp into precise focal point position. A transformer shall be provided inside the optic which reduces the 480 volt input to 10.5 VAC at the lamp giving 5300 hours per lamp and greater than 21,000 hours for the optic.~~

L-810 and L-864 lights shall use LED lamps, must have remote lamp monitoring capability and shall appear in the most recent issuance of FAA AC150/5345-53C Appendix 1 Addendum at the time that they are procured. FAA L-864 Aviation lights shall be synchronized for simultaneous flashing at 20-40 flashes per minute.

Installation and integration of the lights shall be in conformance with FAA AC 70/7460-1K.

The aviation warning system shall be operational ~~as soon as the tower is in place.~~ prior to the time that temporary aviation warning systems installed during construction are removed.